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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/611,597	07/07/2000	Seiji Kobayashi	SONY-T0864	6504

22850 7590 09/03/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

BATTAGLIA, MICHAEL V

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/611,597

Applicant(s)

KOBAYASHI ET AL.

Examiner

Michael V Battaglia

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 26 July 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached Response to Arguments.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1-28

Claim(s) withdrawn from consideration: _____

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
10. ☐ Other: _____

HOA T. NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600
9/2/04

Allowable Subject Matter

1. Claims 6, 7, 16, 17, 21, 22 and 25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Claims 6, 7, 16, 17 and 25 are allowable for the reasons specified in the previous Office action.

In regard to claim 21, none of the references of record alone or in combination disclose or suggest an information reproducing apparatus, wherein in an information reproducing apparatus for irradiating an information recording medium recorded with main data by a pit row or a mark row with a laser beam and receiving a return beam to thereby reproduce the main data, said information reproducing apparatus comprising: reproduced signal generating means for receiving the return beam and generating a reproduced signal, a signal level of which is changed in accordance with the pit row or the mark row; main decoding means for decoding the main data from the reproduced signal; sampling means for sampling the reproduced signal and outputting a sampling signal; and sub decoding means for reproducing sub-data recorded by a local change in a pit or a mark of the pit row or the mark row by repeating to integrate the sampling signal for a predetermined time period; wherein the sub decoding means is set with an integrating time period in correspondence with one bit of the sub-data as a time period by which the pit row or mark row have a minimum size to which one bit of sub-data is allocated that is long enough such that a local change to the pit row or mark row will not affect the main data from being correctly reproduced, and the sub-data will also be decoded correctly; **wherein the integrating time period in correspondence with the one bit of the sub-data that is a time period in correspondence with a length of 1 mm or more of the pit row or the mark row.**

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In regard to claim 22, none of the references of record alone or in combination disclose or suggest an information reproducing apparatus, wherein in an information reproducing apparatus for irradiating an information recording medium recorded with main data by a pit row or a mark row with a laser beam and receiving a return beam to thereby reproduce the main data, said information reproducing apparatus comprising: reproduced signal generating means for receiving the return beam and generating a reproduced signal, a signal level of which is changed in accordance with the pit row or the mark row; main decoding means for decoding the main data from the reproduced signal; sampling means for sampling the reproduced signal and outputting a sampling signal; and sub decoding means for reproducing sub-data recorded by a local change in a pit or a mark of the pit row or the mark row by repeating to integrate the sampling signal for a predetermined time period; wherein the sub decoding means is set with an integrating time period in correspondence with one bit of the sub-data as a time period by which the pit row or mark row have a minimum size to which one bit of sub-data is allocated that is long enough such that a local change to the pit row or mark row will not affect the main data from being correctly reproduced, and the sub-data will also be decoded correctly; **wherein the integrating time period that is in correspondence with the one bit of the sub-data that is a time period by which the area to which one bit of the sub-data is assigned can be seen by optical observation.**

Response to Arguments

2. Applicant's arguments filed July 26, 2004, with respect to claim objections have been fully considered and are persuasive. The objections to the claims have been withdrawn.

3. Applicant's arguments filed July 26, 2004, with respect to the rejections of claims 3, 13 and 22 under 35 U.S.C. 112, second paragraph have been fully considered and are persuasive. The rejections to the claims under 35 U.S.C. 112, second paragraph have been withdrawn.

4. Applicant's arguments filed July 26, 2004 with respect to the rejections of claims 1-28 under 35 U.S.C. 112, first paragraph have been fully considered but they are not persuasive. Applicant merely points out that the specification sets forth that both main data and sub-data can be correctly reproduced while presenting no argument as to how the specification enables one of ordinary skill in the art to make or use a predetermined minimum length of the pit row or mark row to which one bit of the sub-data is allocated that is long enough that a local change to the pit row or mark row will not affect the main data from being correctly reproduced **and** such that the sub-data is correctly reproduced. The examiner agrees that the specification discloses that both main data and sub-data can be correctly reproduced. However, as noted in the previous Office action, the predetermined minimum length of a pit row or a mark row to which a bit of the sub-data is allocated is long enough that the sub-data is correctly reproduced (Page 14, lines 8-14 and Page 22, line 23-Page 24, line 4). A **different** predetermined minimum length, which is the minimum length of a pit or a mark that is locally changed, is long enough that the local change to the pit or the mark will not affect the main data from being reproduced (Page 22,

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lines 9-23). One skilled in the art would not be enabled to determine a predetermined minimum length of the pit row or mark row to which one bit of the sub-data is allocated that is long enough that a local change to the pit row or mark row will not affect the main data from being correctly reproduced because the length of the pit row or mark row to which one bit of the sub-data is allocated is not relevant to correct reproduction of main data. Instead, the length of a pit or a mark that is locally changed in accordance with the logical level of sub-data affects reproduction of main data.

5. Applicant's arguments filed July 26, 2004, with respect to rejections of independent claims under 35 U.S.C. 102(e) based on Yamamoto et al (hereafter Yamamoto '792) (US 6,483,792) have been fully considered but they are not persuasive. Applicant argues that Yamamoto '792 does not disclose or suggest a length to which one bit of sub-data is allocated. However, one bit of sub-data (Figs. 1 and 2, element SC) is allocated to a pit or mark row having the predetermined minimum length of 8 bits of main data (Figs. 1 and 2, element SB) as shown in Figs. 6 and 7. The local change to the pit or mark row caused by sub-data does not affect main data from being correctly reproduced because only pits having a length of 4T or more are locally changed (Col. 2, lines 22-29 and Col. 6, lines 23-38). Sub-data is correctly reproduced by the auxiliary signal detection circuit (Fig. 9, element 71).

6. Applicant's arguments filed July 26, 2004, with respect to rejections of independent claims under 35 U.S.C. 102(e) based on Inazawa et al (hereafter Inazawa) (US 6,587,948) have been fully considered but they are not persuasive. The pit or mark row having the predetermined minimum length to which one bit of sub-data (Fig. 10, element SC1) is allocated is the length of one frame of data (Col. 9, lines 17-19). The local change to the

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pit or mark row caused by sub-data does not affect main data from being correctly reproduced because only pits having a length of 7T or more are locally changed (Col. 10, lines 32-34 and 64-67). The examiner interprets the width equal to or longer than a period of 7T referred to in Col. 10, lines 64-67 as a length. Sub-data is correctly reproduced by the detection unit (Fig. 9, element 28).

7. Applicant's arguments filed July 26, 2004, with respect to rejections of independent claims under 35 U.S.C. 102(e) based on Yamamoto et al (hereafter Yamamoto '552) (US 6,078,552) have been fully considered but they are not persuasive. The pit or mark row having the predetermined minimum length to which one bit of sub-data (Fig. 1, element SC1) is allocated is the length specified by the period of oscillator (Fig. 6, element 18), which is equal to the length of hundreds to thousands of pits (Col. 5, lines 34-65). The local change to the pit or mark row caused by sub-data does not affect main data from being correctly and the sub-data is correctly reproduced (Col. 2, lines 2-10).

8. Applicant's arguments filed July 26, 2004, with respect to the rejections under 35 U.S.C. 103 of claims 21 and 22 have been fully considered and are persuasive. The rejections under 35 U.S.C. 103 of claims 21 and 22 have been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V Battaglia whose telephone number is (703) 305-4534. The examiner can normally be reached on 5-4/9 Plan with 1st Friday off.

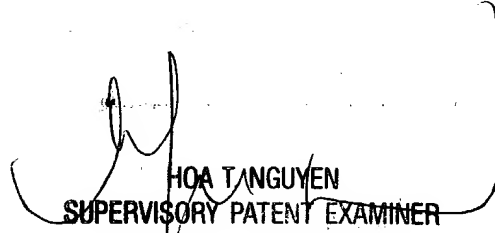
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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